



Kings Meadow Primary School

Design and Technology Policy



1. INTRODUCTION

This document is one of a series that make up the whole CRACKING curriculum statement for the school. It states the school philosophy about the contribution which Design & Technology makes to our pupils' education and the way in which the National Curriculum and Design and Technology are delivered in practice. In effect it is an expanded policy statement and together with the long, medium- and short-term thematic planning constitutes the school scheme of work.

2. INTENT

Why is Design and Technology important:

Design and Technology helps us to develop as reflective learners, as we work through the design process. Through Design and Technology, we are able to work collaboratively to solve problems and find solutions, teaching us to deal with uncertainty whilst developing communication, organisational and other practical life skills. In Design and Technology, we learn to appreciate the needs of others, the built environment and the likely impact of future technologies.

At Kings Meadow we believe that:

- Design and Technology helps children to problem-solve, making on-going changes and improvements during the design and make process.
- In Design and Technology, pupils learn to critique, evaluate and test their own ideas and products and the work of others.
- Design and Technology teaches pupils to understand and apply the principles of nutrition and learn how to cook.
- Design and Technology teaches pupils how to participate successfully in an increasingly technological world.
- Through Design and Technology, pupils develop creative vision, technical vocabulary and practical skills.

Through our **CRACKING** curriculum it is our intention for our children to develop their learning within each cognitive phase through building their knowledge and skills of Design and Technology to learn about:

- Mechanisms
- Sliders
- Levers
- Structures
- Textiles
- Food technology
- Electronics

Sand Lizards (KS1)

In this phase children will, through a variety of creative and practical activities, be taught the knowledge, understanding and skills needed to engage in an interactive process of designing and making. They will be taught to:

- Design purposeful, functional, appealing products for themselves and other users based on design criteria;
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology;
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing];
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics;
- Explore and evaluate a range of existing products;
- Evaluate their ideas and products against design criteria.
- Build structures, exploring how they can be made stronger, stiffer and more stable, explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Red Squirrels (LKS2) and Seagulls (UKS2)

- In these phases, children will, through a variety of creative and practical activities, be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Following our Design and Technology curriculum, children will be taught to:
- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups;
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design;
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately;
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities;
- Investigate and analyse a range of existing products;
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work;
- Understand how key events and individuals in design and technology have helped shape the world;
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures;
- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages];
- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors];
- Apply their understanding of computing to program, monitor and control their products.

3. IMPLEMENTATION

When is Design and Technology taught:

Design & Technology is primarily taught using the 'Kapow' Design and Technology resource and is linked to our CRACKING Curriculum thematic units where ever possible. The attached overview (Appendix 1) shows which Design and Technology units are taught when throughout the academic Year and the designers that the children learn about within each unit.

How is Art taught:

Design and Technology is taught through a combination of subject knowledge and skills. Learning takes place both inside and outside the classroom.

Resources:

Resources for Design and Technology are located in the Art & DT cupboard or within the relevant classrooms.

Adaptive Teaching:

Adaptive teaching in the context of the Design and Technology curriculum refers to tailoring teaching strategies, resources, and lesson structures to meet the diverse needs of all of our pupils, ensuring that every child, regardless of ability or learning style, can access the curriculum and make progress. It involves recognising that pupils have different strengths, challenges, and ways of learning, and adjusting teaching methods to provide appropriate support and challenges. Key aspects of adaptive teaching in the Design and Technology Curriculum include:

- adjusting the difficulty of tasks, providing alternative resources, or offering different modes of presentation.
- Grouping our pupils in various ways based on their needs or the task at hand allows for peer support, and can also provide opportunities for pupils to work with others who may have similar or complementary skills.
- Breaking tasks down into smaller, manageable steps or offering prompts and cues that guide pupils through complex processes like designing, prototyping, or evaluating products.
- Using technology to support learning.
- Regular formative assessments (through questioning, observations, or self/peer assessment) allowing teachers to monitor pupil progress and adjust teaching strategies accordingly.

Adaptive teaching in Design and Technology is about ensuring that our design and technology curriculum is both inclusive and effective for every child.

Oracy in Design & Technology:

Oracy in our Design and Technology *CRACKING* curriculum plays a vital role in helping pupils develop essential communication skills. It encourages children to articulate their ideas, thoughts, and processes clearly and effectively, whether discussing design concepts, presenting solutions, or collaborating with peers. Through activities like group discussions, problem-solving tasks, and project presentations, oracy enhances their ability to explain, justify, and evaluate their decisions in the design process. This not only strengthens their

understanding of D&T concepts but also boosts their confidence and fosters critical thinking, creativity, and teamwork. By integrating oracy into the curriculum, pupils gain the tools to express themselves with clarity and conviction, preparing them for future challenges in both academic and other settings.

4. IMPACT

In order to measure the impact of our teaching and learning, planning and work audits are carried out by the subject leader ensuring coverage and development of skills in line with specific year group expectations. Class teachers also assess children's understanding and skills through observation and discussion of their work (Pupil Voice). In Key Stage 2 the children are also involved in self-evaluating their learning. Work is marked thoroughly in line with the school's Marking Policy.

Formative and summative assessments are used to track children's learning against the statutory objectives in Design and Technology National Curriculum and progress against the expectations are recorded on our 'Insight Tracking' system.

In order to ensure continued improvement in the teaching and learning of Design and Technology, the subject leader is responsible for supporting colleagues by informing them of current developments in the subject and by providing a strategic lead and direction for the subject in school. The subject leader is also responsible for evaluating strengths and weaknesses in the subject and identifying areas for improvement and development.

Reviewed	January 2025
Approved by Governing Body	March 2025
Next Review	January 2028 or sooner if required.